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(54) Title: PROCESSABLE MOLECULARLY IMPRINTED POLYMERS

(57) Abstract: A process is provided herein for preparing molecularly imprinted polymers for detecting a target analyte by Reversible Addition Fragmentation Chain Transfer (RAFT). The process includes providing a complex having the formula L<sup>3</sup>#191M wherein L is a  $\beta$ -diketone ligand containing a chain transfer moiety and L<sup>3</sup>#191 can be the same or different ligands, and M is a lanthanide element; reacting the complex with the target analyte to provide an adduct containing the target analyte; co-polymerizing the adduct with a monomer and cross-linking agent to provide a polymer; and, removing the target analyte from the polymer to provide the molecularly imprinted polymer.

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